

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) Cartridge device (20) for analysing blood comprising:
  - (a) a cell (9) having a receiving portion (10) for receiving a blood sample and a plug or jack portion (18) for receiving a plug or a jack (22);
  - (b) means (19) for circulating said blood sample within said receiving portion (10); and
  - (c) an electrode holder (14) having at least one incorporated electrode pair (16; 24; 25; 26); wherein the electrode holder (14) is attachable to the cell (9) such that one end (16a; 24a; 25a; 26a) of the at least one electrode pair (16; 24; 25; 26) forms a sensor unit (17a; 17b; 17c; 17d) for measuring the electrical impedance between the two electrodes of the at least one electrode pair (16; 24; 25; 26) within the blood sample and that the opposite end (16b; 24b; 25b; 26b) of the at least one electrode pair (16; 24; 25; 26) forms a plug or jack portion (21a; 21b; 21c; 21d) being connectable directly to the plug or the jack (22) for an electrical connection of the sensor unit (17a; 17b; 17c; 17d) to an analyser.
2. (Currently Amended) Cartridge device (20) according to claim 1, ~~characterised in that~~ wherein the cell (9) is made as a one-piece cell by injection moulding.
3. (Currently Amended) Cartridge device (20) according to claim 1 or 2, ~~characterised in that~~ wherein the receiving portion (10) has a cylindrical shape with one open face side.
4. (Currently Amended) Cartridge device (20) according to ~~at least one of the preceding claims,~~ claim 1, wherein at least

partly conical formed funnel tube (11) is connected to the open face side of the receiving portion (10) for filling in the blood sample.

5. (Currently Amended) Cartridge device (20) according to claim 4, ~~characterised in that~~ wherein two guiding rails (13) are positioned on the inner surface of the funnel tube (11) for guiding the electrode holder (14) into position.
6. (Currently Amended) Cartridge device (20) according to claim 4 or 5, ~~characterised in that~~ wherein a stopping wall (27) is positioned between the funnel tube (11) and the jack portion (12) for positioning the electrode holder (14) into a stable position.
7. (Currently Amended) Cartridge device (20) according to ~~at least one of the preceding claims,~~ claim 1, wherein the cell (9) is made of a blood compatible material, such as polystyrene, polymethyl methacrylate (PMMA), polyethylene etc.
8. (Currently Amended) Cartridge device (20) according to ~~at least one of the preceding claims,~~ claim 1, wherein the electrode holder (14) comprises a plastic body (15) which is made by injection moulding.
9. (Currently Amended) Cartridge device (20) according to claim 8, ~~characterised in that~~ wherein the plastic body (15) of the electrode holder (14) has a thickness of about 1 to 5 mm.
10. (Currently Amended) Cartridge device (20) according to ~~at least one of the preceding claims,~~ claim 1, wherein the electrode holder (14) is made of a blood compatible material such as polystyrene, polymethyl methacrylate (PMMA), polyethylene, etc.
11. (Currently Amended) Cartridge device (20) according to ~~at least one of the preceding claims,~~ claim 1, wherein the

electrode holder (14) comprises a L-formed body (15) with a long part (15a) and a short part (15b) perpendicular to the long part (15a)

12. (Currently Amended) Cartridge device (20) according to ~~at least one of the preceding claims, characterised in that~~ claim 1, wherein two electrode pairs (16, 24) are symmetrically incorporated in the electrode holder (14) for two independent separate measurement results.
13. (Currently Amended) Cartridge device (20) according to ~~at least one of the claims 1 to 11, characterised in that~~ claim 1, wherein three electrode pairs (16, 24, 25) are linearly incorporated in the electrode holder (14) for three separate measurement results, wherein one electrode pair (24) is preferably positioned in the middle of the remaining electrode pairs (16, 25) for comparing platelet adhesion and aggregation under varying flow conditions.
14. (Currently Amended) Cartridge device (20) according to ~~at least one of the claims 1 to 11, characterised in that~~ claim 1, wherein four electrode pairs (16, 24, 25, 26) are linearly incorporated in the electrode holder (24) for four separate measurement results for making a double-determination of the platelet aggregation under low and high blood flow conditions.
15. (Currently Amended) Cartridge device (20) according to ~~at least one of the claims 1 to 11, characterised in that~~ claim 1, wherein at least three electrode pairs (16, 24, 25) are arranged symmetrically to each other at the same radial position in the receiving portion (10).
16. (Currently Amended) Cartridge device (20) according to ~~at least one of the preceding claims, characterised in that~~ claim 1, wherein the two electrodes of one electrode pair (16, 24, 25, 26) are positioned parallel to each other and spaced apart from each other.
17. (Currently Amended) Cartridge device (20) according to ~~at least one of the preceding claims, characterised in that~~ claim 1, wherein two

electrode pairs (16, 24, 25, 26) are positioned parallel to each other and spaced apart from each other.

18. (Currently Amended) Cartridge device (20) according to ~~at least one of the preceding claims, characterised in that~~ claim 1, wherein the electrodes are formed as wires made of a first material comprising a high conductivity, which is covered by a second material comprising a high electrical conductivity and being resistant against oxidation.
19. (Currently Amended) Cartridge device (20) according to claim 18, ~~characterised in that~~ wherein the first material is copper, copper alloy, such as copper-silver alloy, copper-magnesium alloy or such like, preferably a silver-copper alloy comprising 0,2 to 2 % silver, most preferably 0,9 % silver.
20. (Currently Amended) Cartridge device (20) according to claim 18 or 19, ~~characterised in that~~ wherein the second material is a precious metal such as silver, platin, gold or such like.
21. (Currently Amended) Cartridge device (20) according to claim 20, ~~characterised in that~~ wherein the second precious metal is a silver coating in the range of about 0,5 to 20 g/kg, most preferably 2 g/kg.
22. (Currently Amended) Cartridge device (20) according to ~~at least one of the preceding claims, characterised in that~~ claim 1, wherein the electrode wires have a diameter of about 0,1 to 0,5 mm, preferably 0,3 mm.
23. (Currently Amended) Cartridge device (20) according to ~~at least one of the preceding claims, characterised in that~~ claim 1, wherein the means (19) are a stir bar (19), which is made of steel, siliconized steel, Teflon or Teflon-coated, preferably siliconized stainless steel, wherein the stir bar (19) is for example actuated by permanent magnets.

24. (Currently Amended) Cartridge device ~~(20)~~ according to ~~at least one of the preceding claims, characterised in that~~ claim 1, wherein the plug ~~(22)~~ is a standard RJ12 plug.
25. (Currently Amended) Cartridge device for analysing blood comprising:
- (a) a cell having a receiving portion for receiving a blood sample;
  - (b) a stirring device for circulating said blood sample within said receiving portion; and
  - (c) at least two electrodes for measuring the electrical impedance between the at least two electrodes within the blood sample; wherein the at least two electrodes consist of a metal comprising a first material with a high electrical conductivity, which is covered by a second material, which has a high electrical conductivity and which is resistant against oxidation.
26. (Currently Amended) Cartridge device according to claim 25, ~~characterised in that~~ wherein the first material is copper, copper alloy, such as copper-silver alloy, copper-magnesium alloy or such like, preferably a silver-copper alloy comprising 0,2 to 2 % silver, most preferably 0,9 % silver.
27. (Currently Amended) Cartridge device according to claim 25 ~~or 26, characterised in that~~ wherein the second material is a precious metal such as silver, platin, gold or such like.
28. (Currently Amended) Cartridge device according to claim 27, ~~characterised in that~~ wherein the second precious metal is a silver coating in the range of about 0,5 to 20 g/kg, most preferably 2 g/kg.
29. (Currently Amended) A method for analysing blood by means of a cartridge device comprising at least three electrode wires or electrodes for measuring the electrical impedance between at least two of the at least three electrode wires or electrodes, comprising the following steps:

- (a) measuring the electrical impedance between at least two different pairs of electrode wires or electrodes;
- (b) comparing the measured electrical impedance values;
- (c) discarding and repeating the measurements in case the variation is outside a predetermined threshold range; or
- (d) indicating the measured electrical impedance values and/or the mean or median value thereof in case the variation is within the predetermined threshold range.

30. (Currently Amended) Method according to claim 29, ~~characterised in that~~ wherein only those measurement values are rejected, which are outside a predetermined threshold range, wherein the remaining measurement values and/or the mean values thereof are indicated.